Level II

Class Problem # 1
Development of Potential Gross Income

You are appraising a neighborhood strip shopping center known as Gateway Shopping Center. The leases with the tenants were entered into at various times over the past five years. The current rent roll follows:

Tenant	Leasable Area	Annual Rent
Kathy's Cards and Gifts	2,500 SF	$37,500
Sports Galore	2,500 SF	$40,000
Deuce Hardware	4,000 SF	$40,000
Palace Restaurant	3,000 SF	$60,000
Mother Goose Shoes	2,000 SF	$40,000
House of Beauty	1,500 SF	$37,500
Safe Insurance	800 SF	$14,400
Vacant Retail Space	2,500 SF	$0
	18,800 SF	$269,400

You have researched the market and found recently negotiated rents for competing shopping centers run $25.00/SF for space regardless of size or build outs.

What Potential Gross Income (PGI) will you use in your reconstructed operating statement for the Gateway Shopping Center?

Level II

Class Problem # 2
Development of Vacancy and Collection Loss

You have researched the properties that compete with the Gateway Shopping Center and have obtained the following information:

Property	Vacant Space	Total Leasable Area	Rents Receivable	Rents Collected
Riverton SC	1,200 SF	20,000 SF	$475,000	$469,775
Eagle Ridge SC	1,050 SF	18,000 SF	$396,000	$392,440
Chatham SC	1,600 SF	26,000 SF	$524,000	$518,760
Hyde Park SC	850 SF	14,000 SF	$322,000	$318,780
Gateway SC (Subject Property	2,500 SF	18,800 SF	$269,400	$269,400

What Vacancy and Collection Loss Rate (V & C) will you use in your reconstructed operating statement for Gateway Shopping Center?

Level II

Class Problem # 3

Development of Effective Gross Income

Use the information from Problems 1 and 2 and develop an Effective Gross Income (EGI). Also, historically the Gateway SC has miscellaneous income of $5,000 annually. What is the Effective Gross Income (EGI) for the subject property?

Level II

Class Problem # 4

Development of Allowable Expenses

Given below is the statement of expenses for the Gateway SC as prepared by the owner's accountant. They are actual bank withdrawals and are assumed to be correct. In your analysis of the statement for appraisal purposes, you have decided that some items can be used as stated, others need to be eliminated, and some need to be pro-rated. Indicate with an "X" which items you would use as stated, pro-rated (over more than one year), or would eliminate from your reconstructed operating statement.

		As Stated	Pro-Rate	Eliminate
A.	Management Fees			
B.	Advertising			
C.	Maintenance Personnel Salaries			
D.	Maintenance Personnel Benefits			
E.	Debt Service on Mortgage			
F.	Water and Sewage Fees			
G.	Electricity			
H.	Gas for Heating			
I.	New Roof			
J.	Miscellaneous Repairs			
K.	Supplies			
L.	Casualty Insurance--3 year policy			
M.	Liability Insurance			
N.	Snow Removal			
O.	Income Tax			
P.	Donation, Christmas Gift Expense			
Q.	Real Estate Taxes			

Level II

Class Problem # 5

Development of Reserve for Replacements

The following are capital items on the Gateway SC that have to be replaced periodically.

The roof costs $30,000 to replace and typically lasts 15 years.
The HVAC equipment lasts 20 years and costs $20,000 to replace.
The parking lot has to be re-paved every 10 years at a cost of $40,000.
The awnings and store fronts need updated every 15 years at a cost of $50,000.

Set up the Reserve for Replacements Account that you will use in your reconstructed operating statement. Determine the annual expense for these items.

Level II

Class Problem # 6

Development of Expense Ratio

An expense ratio is the total allowable expenses, including reserves, stated as a percentage of Effective Gross Income. (EGI)

You have obtained the following information on properties comparable to the Gateway SC:

Property	EGI	Expenses	Reserve for Replacements
Riverton SC	$469,775	$135,330	$15,000
Eagle Ridge SC	$392,440	$117,500	$12,000
Chatham SC	$518,760	$148,000	$18,000
Hyde Park SC	$318,780	$88,020	$10,800

What expense ratio should you use in your reconstructed operating statement for Gateway SC?

Level II

Class Problem # 7

Reconstructed Operating Statement

Using the information you developed for Problems 1, 2, 3, and 6, reconstruct an operating statement for the Gateway Shopping SC. Then develop its Net Operating Income (NOI).

Level II

Class Problem # 8

<u>Land and Building Capitalization Rates</u>

You are given the following information:

Discount Rate	9.0%
Mortgage Rate	6.5%
Recapture Rate	2.5%
Effective Tax Rate	1.5%
Nominal Tax Rate	$3.00 per $100 of Assessed Value

Calculate a Land Capitalization Rate. ____________

Calculate an improvement/building capitalization rate. ____________

Level II

Class Problem # 9

Overall Capitalization Rate

and

Weighted Land and Building Cap Rates

You are given the following information:

Discount Rate	8.0%
Recapture Rate	2.0%
Effective Tax Rate	2.0%
Land to Building Ratio	1:3

Calculate an overall capitalization rate (OAR)

Level II

Class Problem # 10

Overall Capitalization Rate From the Market

You have obtained the following information on properties comparable to the Gateway Shopping Center:

Property	EGI	Total Exp. And RR	Sale Price
Riverton SC	$469,775	$150,330	$2,778,000
Eagle Ridge SC	$392,440	$129,500	$2,307,000
Chatham SC	$518,760	$166,000	$3,065,000
Hyde Park SC	$318,780	$98,820	$1,895,000

Calculate an overall capitalization rate.

Level II

Class Problem # 11

Direct Capitalization and Overall Cap Rate

Use the answers from Problems 7 and 10 and calculate the value of the Gateway Shopping Center using direct capitalization in the income approach to value.

Level II

Class Problem # 12

Direct Capitalization Vs. Gross Income Multiplier

Using the EGI arrived at in Problem # 3 and the chart below from problem # 10, calculate a Gross Income Multiplier (GIM) and determine the value of the subject property using Direct Capitalization in the Income Approach.

Then compare this answer to the one you arrived at in Problem # 11:

Property	EGI	Total Exp. And RR	Sale Price
Riverton SC	$469,775	$150,330	$2,778,000
Eagle Ridge SC	$392,440	$129,500	$2,307,000
Chatham SC	$518,760	$166,000	$3,065,000
Hyde Park SC	$318,780	$98,820	$1,895,000

Level II

Practice Problem # 1 PGI-EGI-NOI

You have obtained the following information:

A building has total of 40,000 Square Feet. There is 8,000 Square Feet of common area. Market rent is currently $20.00 per square foot of net leasable area. The Vacancy and Collection Loss Rate is 6%. The Operating Expense and the Reserves for Replacements is at 18%. The Overall Capitalization Rate is 10%.

You are to develop the Potential Gross Income (PGI), the Effective Gross Income (EGI), and the Net Operating Income (NOI). Once you have done that, calculate an estimate of value for this property.

Level II

Practice Problem # 2

Development of NOI and Overall Cap Rate

Potential Gross Income		$150,000
Vacancy and Collection Loss		10%
Operating Expense		$25,000
Christmas Gift		$2,500
Property Value		$800,000
Loan to value ratio		0.4

The above is given to you. Develop the NOI and the Overall Capitalization Rate.

Level II

Practice Problem # 3
Expense Ratio Problem

You have obtained the following information. Develop an Expense Ratio for the subject property based on this market information. What expense ratio will you use for your subject property?

SC	EGI	Expenses	Reserves	Total Exp	Exp Ratio
Riverton	$469,775	$135,330	$15,000		
Eagle Ridge	$392,440	$117,500	$12,000		
Chatham	$518,760	$148,000	$18,000		
Hyde Park	$318,780	$88,020	$10,800		

Income Approach

Practice Problem # 4 (A)

Gross Rent and Gross Income Multipliers

Gross Rent Multiplier Problem

The subject property is a single family dwelling which is rented for $475 per month The market rent is also $475 per month. Develop a GRM from the following datā and use it to calculate a possible indication of value.

Sales

	1	2	3	4	5	6
Sale Price	$60,000	$72,000	$65,000	$62,000	$68,000	$70,000
Monthly Rent (EGI)	$425	$520	$460	$450	$490	$500
GRM						

Practice Problem # 4 (B)

Gross Income Multiplier Problem

The subject property produces Gross Annual Effective Gross Income of $72,000. Analysis of rents and, sales of comparable properties rendered the following. Based upon this information calculate a Gross Income Multiplier (GIM) and then calculate an indication of value for the subject

Sale	Sale Price	EGI	GIM	Range
1	$675,000	$75,000		
2	$600,000	$68,000		
3	$720,000	$85,700		
4	$750,000	$87,500		
5	$650,000	$73,000		

Estimated value of subject property:

Value using Median	
Value using Low range	
Value using High range	